To: Ostendorf, Jody[ostendorf.jody@epa.gov]
From: Todd Wetzel
Sent: Wed 12/16/2015 5:26:03 PM
Subject: Re: Uinta Basin Technical Planning
Anonymous Combustor BACT Analysis.pptx

Jody,
Here is the PowerPoint I put together with the summary of BACT costs that I put together for 4 companies out in the Uintah Basin. Company B used numbers that were outrageous and even their revised submittal was very high, given their history their numbers were not given much weight.

I wrote up a document that accompanied this that has somehow disappeared. It basically explained the rational for controlling these emissions, the importance, and the economic feasibility. It also tied our 4 TPY threshold to the lower removal threshold found in Subpart OOOO. It also made note of the number of facilities out in the Basin, and the importance of control technologies at a reasonable level based on sheer quantity and the age of the facilities. Sorry I cant find that document anywhere I will check my home computer later this evening, they re-mapped our servers and I am afraid this one might have vanished.

Let me know if this is helpful or if you had something else in mind. I did this detailed analysis a little over a year ago, when I was fairly new to DAQ, so I am not saying it doesn't have its holes, but it should help explain where our threshold comes from on an economic level.

Thanks,
Todd

On Tue, Dec 15, 2015 at 2:40 PM, Ostendorf, Jody <ostendorf.jody@epa.gov> wrote:

> Thank you Todd, I appreciate it!
>
> Jody Ostendorf
>
> State Implementation Plan Program Manager
>
> Uinta Basin Project Coordinator
>
> Air Quality Planning Unit (8P-AR)
>
> 1595 Wynkoop Street
>
> Denver, CO 80202-1129
>
> 303.312.7814

From: Todd Wetzel [mailto:twetzel@utah.gov]
Sent: Tuesday, December 15, 2015 2:01 PM
To: Ostendorf, Jody <ostendorf.jody@epa.gov>

Subject: Re: Uinta Basin Technical Planning

Jody,

Yes I apologize that was my intent. Let me dig it up and make sure it all makes sense and I will send it over. Look for it either later today or tomorrow.

Todd

On Mon, Dec 14, 2015 at 2:43 PM, Ostendorf, Jody <ostendorf.jody@epa.gov> wrote:

> Hi Todd,
>
> In our Nov. 19th coordination call, we talked about DAQ's rationale for the 4 tpy threshold in its minor source rule. You explained how the number was arrived at through a BACT analysis for tank batteries and that the cost/ton removal cost stopped making sense at around 3.5 tpy. I have in my notes that you were going to send us something in writing, was that your recollection??
>
> We are getting pushback from HQ that it's not enough for us to say we're matching Utah's rule threshold in our FIP, we need to have a reason. Do you have something in writing about the BACT analysis you did, that you could share with us?
>
> Thanks,

Jody

Jody Ostendorf

State Implementation Plan Program Manager

Uinta Basin Project Coordinator

Air Quality Planning Unit (8P-AR)

1595 Wynkoop Street

Denver, CO 80202-1129

303.312.7814

From: Todd Wetzel [mailto:twetzel@utah.gov]
Sent: Tuesday, September 22, 2015 4:49 PM
To: Smith, Claudia
Cc: Beeler, Cindy; Siffring, Stuart; Gilbert, Alexas; Dresser, Chris; Ostendorf, Jody; Sheila Vance; woswald@utah.gov; mberger@utah.gov; Rothery, Deirdre; blebaron@utah.gov
Subject: Re: Uinta Basin Technical Planning

Claudia,

Attached are two recent Approval Orders (AO) issued in the Uintah Basin. The language we were discussing about the well decline emissions is not in the AO, it shows up on the Engineering Review that the source has to sign that ends up in the sources file.

The language included is as follows:

"In a recently published study, "Using growth and decline factors to project VOC emissions from oil and gas production" (Journal of the Air and Waste Management Association: January, 2015), staff with the Utah Division of Air Quality calculate VOC emissions from production at new wells along with those from declining production at existing wells in the Uintah Basin. These emissions were then adjusted downward for the impact of both existing and anticipated

future VOC control strategies to estimate cumulative VOC emissions for each year from 2012 to 2018. The results demonstrate that even with a projected growth of approximately 130% the cumulative VOC emissions in the area will not increase over the same period. This study focused only on the largest VOC emission source categories; oil tanks, pneumatic devices, pneumatic pumps, and tank truck filling, associated with oil production in the Uintah Basin. The analysis was limited to oil production as opposed to gas production because close to 100% of the gas production in the Uintah Basin is found on Indian Country where air quality is regulated by EPA and the Ute Tribe rather than the State of Utah. The study authors are currently working to improve this estimation methodology so that it can be applied to Basin-wide estimates."

Let me know if you have any questions.

On Tue, Sep 22, 2015 at 4:27 PM, Smith, Claudia <Smith.Claudia@epa.gov> wrote:

> All,
>
> Thanks again for taking the time to meet with us today. The discussion was very informative and helpful.
>
> To recap our discussion today (please make any corrections if necessary), we heard that UDAQ's plans for near-term rulemaking include requiring all existing minor oil and gas sources to register regardless of whether or not their facility-wide emissions exceed 5 tpy of NSR-regulated pollutants and to tie those registrations with the emissions inventory effort with a requirement to update the emissions inventory every 3 years. This might be something EPA should look into for Indian country if we move forward with a potential FIP, for the purposes of continuity with the basin-wide emissions inventory effort.
>
> Regarding UDAQ's minor source preconstruction permitting program, we heard a recognition that there are likely many minor sources that historically should have gotten permits to construct that did not and there is a concerted effort now to retroactively require individual permits for those sources that exceed the minor source emissions thresholds of 5 tpy. The permits that have recently been issued, and the permits that will be issued, apply present day minor source BACT, which is a case-by-case determination, but generally includes combustor control when combined emissions from combustion-controllable emissions units (i.e., tanks,

dehydrators, and pneumatic pumps) exceeds 4 tpy VOC for a facility, plus annual LDAR inspections (in some cases more frequent, based on emissions in comparison to NSR major source thresholds).

Regarding cost info that UDAQ has for LDAR, it is a wide range based on information operators have submitted. There is no particular analysis that UDAQ performed.

Regarding the well decline emissions accounting method, it is used in permitting on a case-by-case basis for demonstrating that a minor source will not cause or contribute to a NAAQS violation, but not yet on a broader basin-wide emissions reduction strategy.

UDAQ did not express any concerns with EPA's current plans for a potential FIP, which would include requirements to control existing Indian country oil and gas sources with emissions that exceed 5 tpy VOC, applying minor source BACT as similar as possible to UDAQ's minor source permitting requirements, and to control all existing Indian country oil and gas sources applying current UDAQ existing source requirements (retrofit existing high bleed pneumatic controllers with low/no bleed, retrofit existing combustors with auto ignition devices, submerged/bottom fill truck loading and unloading, and proper equipment operation and maintenance).

UDAQ committed to sharing examples of minor source permits issued to oil and gas sources for EPA review so that any potential FIP language would be consistent in the interest of levelling the playing field. EPA committed to keeping UDAQ updated on our schedule/progress and sharing any materials we can as we progress.

If we have any questions upon reviewing the example permits you provide, we will reach out at that time. If you have any questions for us, please reach out at any time as well.

Thanks,

Claudia

Claudia Young Smith

Environmental Scientist

US EPA Region 8 Air Program

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http://www2.epa.gov/region8/air-permitting

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1595 Wynkoop Street

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Denver, Colorado 80202

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-----Original Appointment-----
From: Smith, Claudia
Sent: Wednesday, September 16, 2015 9:11 AM

To: Smith, Claudia; Beeler, Cindy; Siffring, Stuart; Gilbert, Alexas; Dresser, Chris; Ostendorf, Jody; Sheila Vance; woswald@utah.gov; twetsel@utah.gov; mberger@utah.gov
Subject: Uinta Basin Technical Planning
When: Tuesday, September 22, 2015 2:00 PM-4:00 PM (UTC-07:00) Mountain Time (US & Canada).
Where: EPA Prairie Rose Room; Call In: 1-866-299-9141, participant code:44585411

This meeting is to discuss UDAQ and EPA Region 8's current and planned regulation of existing oil and natural gas production sources, to ensure that regulation is consistent across Uinta Basin jurisdictions.

EPA Region 8 has the following questions for UDAQ to mull over prior to the meeting:

1. Was LDAR at well sites/pads considered BACT in minor source permits issued to oil and natural gas production facilities pre-GAO? Will it be considered BACT in the ~300-400 minor source permit applications now in house at UDAQ (estimate from Brock Lebaron). If not, is it being considered for future planned regulation of existing sources? If planned for future regulation of existing sources, will well sites be treated differently than compressor stations? Will there be a similar throughput levels below which less frequency will be required?

2. Was control of produced fluids storage tanks, dehydrators, and pneumatic pumps considered BACT in minor source permits issued pre-GAO? Will it be considered BACT in the ~300-400 minor source permit applications now in house at UDAQ? If not, is it being considered for future planned regulation of existing sources? If so, would there be uni-specific thresholds (tpy emissions or throughput) below which control is not required?

3. In the GAO, there is a stepped frequency to LDAR inspections based on throughput at certain levels (i.e., >10,000 bbls/yr and >25,000 bbls/yr). What was the rationale behind those throughput distinctions? Do those levels correlate to particular VOC tpy estimates?

4. Is there a level of uncontrolled potential VOC emissions below which individual tanks, dehydrators, pneumatic pumps, pneumatic controllers, or other controlled equipment at a >5 tpy VOC source are not required to have BACT in minor source permits issued to oil and natural gas production facilities?

5. Is the well decline accounting method currently being used to justify approval of new sources?

If UDAQ has any questions for EPA Region 8 Staff, please send them and I will add them to this invite, along with any additional questions from EPA that might come up.

Thanks,

Claudia

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Todd Wetzel

Environmental Engineer

Division of Air Quality

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